ABSTRACT

Methods and arrangements are provided that substantially reduce the requisite amount of data required to conduct postmortem analysis following a computer failure. The methods and arrangements can be advantageously configured to allow for rapid online user support for a variety of users, computing devices, operating systems, applications, and the like. One method includes determining when to generate a dump file, and generating a dump file by gathering thread, callstack and thread context information for the running thread, process identifying information associated with the running thread, and information identifying the reason for generating the dump file. The resulting dump file is then stored to a storage medium and accessed during subsequent analysis. The dump file can be a kernel minidump file that is associated with an operating system program failure, in which case the running thread is the single thread that was running when the failure occurred. The kernel minidump file would include the kernel callstack and the process identifying information that would identify the process that initiated the single thread. The method is further applicable to non-operating system programs, wherein a user minidump file is generated by also gathering callstack information for all running threads, thread context information for all running threads, and a listing of all loaded modules for the faulting non-operating system program.